

# COMPREHENSIVE ASBESTOS SURVEY

COMMERCIAL BUILDING  
307/309 EAST MAIN STREET  
MONCK'S CORNER, SOUTH CAROLINA 29461



*Prepared For:*

**CITY OF MONCK'S CORNER**  
**Attention: Mr. Jeffrey Lord**  
**PO Box 700**  
**Moncks Corner, SC 294461**  
**(843) 719-7910**

*Performed By:*

\_\_\_\_\_ **T E S** \_\_\_\_\_

**Trident Environmental Services, Inc.**

*Consultants in Industrial Hygiene and Safety*  
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Summerville, SC 29485  
(843) 873-3648

# COMPREHENSIVE ASBESTOS SURVEY

Commercial Building  
307/309 East Main Street  
Moncks Corner, South Carolina 29461

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## **EXECUTIVE SUMMARY**

The comprehensive asbestos survey performed by Trident Environmental Services, Inc. on June 30, 2016 of the Commercial Building located at 307/309 East Main Street in Moncks Corner, South Carolina **did** reveal the presence of asbestos containing building materials. The following summary exhibits the asbestos containing building materials (ACBM) that were identified in the inspection.

### **Asbestos**

<b>Description</b>	<b>Type</b>
<b>Drywall/Joint Compound</b>	<b>RACM – Friable</b>
<b>Window Glaze</b>	<b>RACM – Friable</b>
<b>Transite Siding</b>	<b>Category II – Non Friable</b>

RACM – Regulated Asbestos Containing Material

\*PACM – Presumed Asbestos Containing Material

The identified asbestos containing building materials (ACBM's) to include the item(s) listed above. All removal work of the identified ACBM's should be performed by a properly trained and licensed abatement contractor prior to the planned renovation/demolition activities.

## **BACKGROUND**

Trident Environmental Services, Inc. was contracted by the City of Moncks Corner to perform an asbestos survey of the Commercial Building located at 307/309 East Main Street in Moncks Corner, South Carolina. The survey was performed in order to satisfy the NESHAP requirements for renovation and/or demolition. The structure is built slab on grade and the area of inspection consists of approximately 2,010 square feet. Interior walls are drywall/joint compound, wood panels and concrete. Ceilings are acoustic ceiling tiles and drywall/joint compound. Floor finishes include vinyl sheet flooring, carpet and concrete. Roof is constructed with corrugated metal panels.

### **Asbestos**

The inspection was conducted to identify asbestos-containing building materials (ACBM) which may be disturbed during the renovation/demolition activities. The identification of ACBM's will aid in the prevention of occupational exposures and/or environmental releases of airborne asbestos fibers. Identification of ACBM also complies with Title 40 Code of the Federal Regulations, Part 61, and South Carolina Department of Health and Environmental Control (SCDHEC) Regulation 61-86.1, along with Title 29 Code of Federal Regulations, Part 1926 enforced by the Occupational Safety and Hazard Administration (OSHA). The Asbestos Survey describes the investigative procedures utilized, results of the suspect ACBM sampled/analyzed, and recommendations regarding the structures as related to asbestos.

## **ASBESTOS SURVEY**

### **Asbestos Investigative Procedures**

Trident Environmental Services, Inc. conducted an inspection for suspect ACBM's on June 30, 2016 of the Commercial Building located at 307/309 East Main Street in Moncks Corner, South Carolina. It is our understanding that the subject structure will undergo renovation or demolition activities in the near future. The asbestos survey was performed by observing and sampling suspect building materials. Significant destructive testing was not utilized during the inspection. There is a possibility that suspect materials exist in inaccessible areas such as wall cavities and pipe chases. If any additional suspect ACBM's are discovered during the course of demolition activities, bulk samples should be extracted to identify the presence, or absence, of asbestos prior to continuation of work activities.

A sampling strategy was developed to provide representative samples for analysis. Samples were then extracted from a variety of suspect ACBM's. Bulk samples collected were recorded on a Chain-of-Custody record and submitted to Electron Microscopy Services Laboratory Analytical, Inc. (EMSL) a Polarized Light Microscopy (PLM) laboratory. The laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), which is administered by the National Institute of Standards and Technology (NIST). EMSL is accredited by NVLAP for the analysis of bulk asbestos by PLM ([NVLAP Lab Code: 200841-0](#)). NOB samples were submitted to EMSL for analyses by Transmission Electron Microscopy (TEM) as required by SCDHEC.

The suspect materials were analyzed by trained microscopists utilizing PLM techniques coupled with dispersion staining in accordance with EPA Test Method Title 40 Code of Federal Regulations, Chapter I (1-1-87 edition), Part 763, Subpart F- Appendix A. This method identifies asbestos mineral fibers based on six optical characteristics: morphology, birefringence, refractive index, extinction angle, sign of elongation and dispersion staining colors. The laboratory analysis reports the specific type of asbestos identified (there are six asbestos minerals) and the percentage of asbestos present. The EPA and OSHA defines materials as asbestos containing if an asbestos content of greater than one percent (>1%) is detected in a representative sample.

The SCDHEC require NOB materials with negative or trace results by PLM to be analyzed by at least one TEM. SCDHEC in accordance with ASTM E 2356-04 defines NOB materials as "materials that are not friable and that consist of fibers and other particulate matter embedded in a solid matrix of asphalt, vinyl or other organic substances." Examples of NOB materials include but are not limited to flooring materials such as vinyl floor tiles, vinyl sheet flooring, adhesives, mastics, asphalt shingles, roofing materials, glazing, caulks, and cove base.

The EPA classifies ACBM into two categories, friable and non-friable. A friable material creates a greater health hazard due to the fact that it may be “crumbled, pulverized or reduced to powder by the forces expected to act upon it in the course of demolition or renovation operations.”

*Friable Asbestos* material means any material containing more than one percent asbestos as determined using the method specified in appendix A, subpart F, 40 CFR part 763 section 1, Polarized Light Microscopy, that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM.

*Category I Non Friable Asbestos-Containing Material (ACM)* means asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than one percent asbestos as determined using the method specified in appendix A, subpart F, 40 CFR part 763, section 1, Polarized Light Microscopy.

*Category II Non Friable ACM* means any material, excluding Category I non friable ACM, containing more than one percent asbestos as determined using the methods specified in appendix A, subpart F, 40 CFR part 763, section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure (cement siding, transite board shingles, etc.).

*Regulated Asbestos-Containing Material (RACM)* means (a) Friable asbestos material, (b) Category I non friable ACM that has become friable, (c) Category I non friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

The following section summarizes the sample numbers, locations, type material, asbestos type, percent of asbestos detected, present condition of the asbestos containing material, potential for disturbance, and hazard assessment ratings. The asbestos sample laboratory analyses and chain of custody records are included at the end of this report.

### Asbestos Abbreviations and Hazard Assessment Key

The EPA and SCDHEC require that confirmed ACBM is given a hazard assessment based on its present condition and potential for future disturbance. This hazard assessment is used as a tool for prioritization in future remedial actions regarding the ACBM. The following key demonstrates the criteria that make up the hazard assessment.

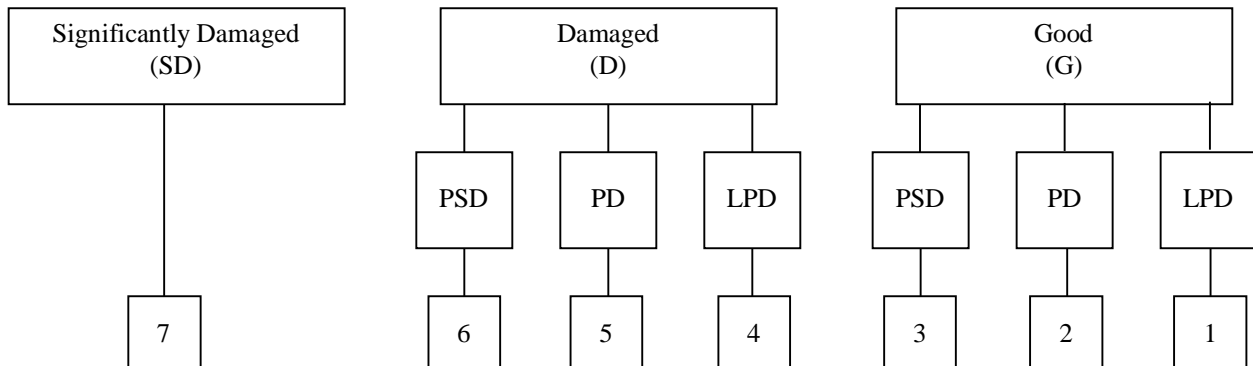
#### **Present Condition**

F = Friable                      G = Good (very localized limited damage)  
NF = Non-friable              D = Damaged (<10% distributed and/or <25% localized)  
S = Significantly Damaged ( $\geq$ 10% distributed and/or 25% localized)

#### **Potential for Future Disturbance**

LPD = Low Potential for Disturbance (Contact, Vibration, and/or Air Erosion – low concern)  
PD = Potential for Damage (Contact, Vibration, and/or Air Erosion – moderate concern)  
PSD = Potential for Significant Damage (Contact, Vibration and/or Air Erosion – high concern)

#### **Hazard Assessment**



**HOMOGENOUS AREA ESTIMATED FOOTAGE TABLE**  
**Commercial Building – 307/309 East Main Street – Moncks Corner, SC**

HOMOGENOUS AREA ID #	DESCRIPTION	ESTIMATED AMOUNT
01	1' x 1' Ceiling Tile	540 SF
02	Vinyl Sheet Flooring (beige stone)	170 SF
03	Stair Tread Mastic (brown)	56 SF
04	Stair Tread (tan)	56 SF
05	Wire Insulation	600 LF
06	Interior Caulk	20 SF
07	Drywall	5,486 SF
<b>08</b>	<b>Joint Compound</b>	<b>5,486 SF</b>
09	Exterior Caulk	57 SF
<b>10</b>	<b>Window Glaze</b>	<b>44 SF</b>
11	Felt Paper	2,840 SF
<b>12</b>	<b>Transite Siding</b>	<b>1,000 SF</b>
13	Vinyl Sheet Flooring (black/gray stone)	360 SF
14	Vinyl Mastic (tan)	360 SF
15	Vinyl Sheet Flooring (beige/blue flowers)	558 SF
16	Vinyl Mastic (tan)	558 SF
17	Carpet Mastic (tan)	1,764 SF



### **ASBESTOS SUMMARY**

#### **Commercial Building – 307/309 East Main Street – Moncks Corner, SC**

<b>DESCRIPTION</b>	<b>TYPE</b>	<b>ESTIMATED AMOUNT</b>
<b>Drywall/Joint Compound</b>	<b>RACM – Friable</b>	<b>5,486 SF</b>
<b>Window Glaze</b>	<b>RACM – Friable</b>	<b>44 SF</b>
<b>Transite Siding</b>	<b>Category II – Non Friable</b>	<b>1,000 SF</b>

RACM – Regulated Asbestos Containing Material

\*PACM – Presumed Asbestos Containing Material

Asbestos fibers were identified in the Drywall/Joint Compound. Approximately 5,486 square feet is present and in good condition. This material is considered RACM – Friable Asbestos and is located on the walls and ceilings throughout the structure (see diagram).

Asbestos fibers were identified in the Window Glaze. Approximately 44 square feet is present and in good condition. This material is considered RACM – Friable Asbestos and is located on exterior windows.

Asbestos fibers were identified in the Transite Siding. Approximately 1,000 square feet is present and in good condition. This material is considered Category II – Non Friable Asbestos and is located on the exterior of the building.

**The estimated quantities provided should be verified by contractor and/or building owner. Any discrepancies are to be addressed prior to removal of ACM. Please note that removal costs vary depending on the contractor, the quantity/condition of the ACM, and the accessibility/location of the ACM.**

## ASBESTOS SAMPLE DATA TABLE

### Commercial Building – 307/309 East Main Street – Moncks Corner, SC

DESCRIPTION OF EACH SAMPLE AREA				LABORATORY		ASSESSMENT OF MATERIALS	
Homogeneous Area & Sample ID	Description	Location/Room #	Friable (Y/N)	Asbestos Present		Condition Assessment Category	Hazard Assessment Category
				Percent	Asbestos		
01-01	1' x 1' Ceiling Tile	Sales Floor	Y	0.0%	ND	7	N/A
01-02	1' x 1' Ceiling Tile	Sales Floor	Y	0.0%	ND	7	N/A
01-03	1' x 1' Ceiling Tile	Sales Floor	Y	0.0%	ND	7	N/A
02-04	Vinyl Sheet Flooring (beige stone)	Room 1	Y	0.0%	ND	7	N/A
02-05	Vinyl Sheet Flooring (beige stone)	Room 1	Y	0.0%	ND	7	N/A
02-06 T	Vinyl Sheet Flooring (beige stone)	Room 1	Y	0.0%	ND	7	N/A
03-07	Stair Tread Mastic (brown)	Stairwell	N	0.0%	ND	7	N/A
03-08	Stair Tread Mastic (brown)	Stairwell	N	0.0%	ND	7	N/A
03-09 T	Stair Tread Mastic (brown)	Stairwell	N	0.0%	ND	7	N/A
04-10	Stair Tread (tan)	Stairwell	N	0.0%	ND	7	N/A
04-11	Stair Tread (tan)	Stairwell	N	0.0%	ND	7	N/A
04-12 T	Stair Tread (tan)	Stairwell	N	0.0%	ND	7	N/A
05-13	Wire Insulation	Attic	Y	0.0%	ND	7	N/A
05-14	Wire Insulation	Attic	Y	0.0%	ND	7	N/A
05-15	Wire Insulation	Attic	Y	0.0%	ND	7	N/A
06-16	Interior Caulk	Restroom	N	0.0%	ND	7	N/A
06-17	Interior Caulk	Restroom	N	0.0%	ND	7	N/A
06-18 T	Interior Caulk	Restroom	N	0.0%	ND	7	N/A
07-19	Drywall	Room 4	Y	0.0%	ND	7	N/A
07-20	Drywall	Room 6	Y	0.0%	ND	7	N/A
07-21	Drywall	Room 7	Y	0.0%	ND	7	N/A
08-22	Joint Compound	Room 4	Y	2.0%	CHRY	4	1
08-23	Joint Compound	Room 4	Y	NT	PACM	4	1
08-24	Joint Compound	Room 6	Y	NT	PACM	4	1
08-25	Joint Compound	Room 7	Y	NT	PACM	4	1
08-26	Joint Compound	Room 7	Y	NT	PACM	4	1
09-27	Exterior Caulk	Exterior Door	N	0.0%	ND	7	N/A
09-28	Exterior Caulk	Exterior Door	N	0.0%	ND	7	N/A

#### Assessment Categories

- |  |   |
|--|---|
| (1) Thermal Systems Insulation – Good Condition        | (5) Surfacing – Damaged                   |
| (2) Thermal Systems Insulation – Damaged               | (6) Surfacing – Significantly Damaged     |
| (3) Thermal Systems Insulation – Significantly Damaged | (7) Miscellaneous – Good Condition        |
| (4) Surfacing – Good Condition                         | (8) Miscellaneous – Damaged               |
|  | (9) Miscellaneous – Significantly Damaged |

#### Asbestos Present

- |                      |                          |
|----------------------|--------------------------|
| AMOS – Amosite       | ACTI – Actinolite        |
| CHRY – Chrysotile    | ND – None Detected       |
| CROC – Crocidolite   | NT – Not Tested          |
| ANTH – Anthophyllite | PACM – Presumed ACM      |
| TREM – Tremolite     | <b>Asbestos Detected</b> |

## ASBESTOS SAMPLE DATA TABLE

### Commercial Building – 307/309 East Main Street – Moncks Corner, SC

DESCRIPTION OF EACH SAMPLE AREA				LABORATORY		ASSESSMENT OF MATERIALS	
Homogeneous Area & Sample ID	Description	Location/Room #	Friable (Y/N)	Asbestos Present		Condition Assessment Category	Hazard Assessment Category
				Percent	Asbestos		
09-29T	Exterior Caulk	Window 1	N	0.0%	ND	7	N/A
10-30	Window Glaze	Window 1	Y	3.0%	CHRY	7	1
10-31	Window Glaze	Window 1	Y	NT	PACM	7	1
10-32	Window Glaze	Window 1	Y	NT	PACM	7	1
11-33	Felt Paper assoc. w/Siding	Exterior Siding	N	0.0%	ND	7	N/A
11-34	Felt Paper assoc. w/Siding	Exterior Siding	N	0.0%	ND	7	N/A
11-35 T	Felt Paper assoc. w/Siding	Exterior Siding	N	0.0%	ND	7	N/A
12-36	Transite Siding	Exterior Siding	N	10.0%	CHRY	7	1
12-37	Transite Siding	Exterior Siding	N	NT	PACM	7	1
12-38	Transite Siding	Exterior Siding	N	NT	PACM	7	1
13-39	Vinyl Sheet Flooring (black/gray stone)	Room 8	Y	0.0%	ND	7	N/A
13-40	Vinyl Sheet Flooring (black/gray stone)	Room 8	Y	0.0%	ND	7	N/A
13-41 T	Vinyl Sheet Flooring (black/gray stone)	Room 8	Y	0.0%	ND	7	N/A
14-42	Sheet Flooring Mastic (tan)	Room 8	N	0.0%	ND	7	N/A
14-43	Sheet Flooring Mastic (tan)	Room 8	N	0.0%	ND	7	N/A
14-44 T	Sheet Flooring Mastic (tan)	Room 8	N	0.0%	ND	7	N/A
15-45	Vinyl Sheet Flooring (beige/blue flowers)	Room 8	Y	0.0%	ND	7	N/A
15-46	Vinyl Sheet Flooring (beige/blue flowers)	Room 8	Y	0.0%	ND	7	N/A
15-47 T	Vinyl Sheet Flooring (beige/blue flowers)	Room 8	Y	0.0%	ND	7	N/A
16-48	Sheet Flooring Mastic (tan)	Room 8	N	0.0%	ND	7	N/A
16-49	Sheet Flooring Mastic (tan)	Room 8	N	0.0%	ND	7	N/A
16-50 T	Sheet Flooring Mastic (tan)	Room 8	N	0.0%	ND	7	N/A
08-51	Joint Compound	Room 10	Y	NT	PACM	4	1
08-52	Joint Compound	Room 11	Y	NT	PACM	4	1
17-53	Carpet Mastic (tan)	Unit 309	N	0.0%	ND	7	N/A
17-54	Carpet Mastic (tan)	Unit 309	N	0.0%	ND	7	N/A
17-55 T	Carpet Mastic (tan)	Unit 309	N	0.0%	ND	7	N/A

#### Assessment Categories

- |  |   |
|--|---|
| (1) Thermal Systems Insulation – Good Condition        | (5) Surfacing – Damaged                   |
| (2) Thermal Systems Insulation – Damaged               | (6) Surfacing – Significantly Damaged     |
| (3) Thermal Systems Insulation – Significantly Damaged | (7) Miscellaneous – Good Condition        |
| (4) Surfacing – Good Condition                         | (8) Miscellaneous – Damaged               |
|  | (9) Miscellaneous – Significantly Damaged |

#### Asbestos Present

- |                      |                          |
|----------------------|--------------------------|
| AMOS – Amosite       | ACTI – Actinolite        |
| CHRY – Chrysotile    | ND – None Detected       |
| CROC – Crocidolite   | NT – Not Tested          |
| ANTH – Anthophyllite | PACM – Presumed ACM      |
| TREM – Tremolite     | <b>Asbestos Detected</b> |

## **CONCLUSIONS/RECOMMENDATIONS**

### **Asbestos Inspection**

The comprehensive asbestos survey performed by Trident Environmental Services, Inc. on June 30, 2016 of the Commercial Building located at 307/309 East Main Street in Moncks Corner, South Carolina **did** reveal the presence of ACBM's. Renovation or demolition activities that will disturb the ACBM's will require removal per state and federal regulations. Asbestos materials can become hazardous when, due to damage, disturbance, or deterioration over time, they release asbestos fibers into the air of the building. All areas that contain asbestos should be utilized in a controlled manner to reduce the potential for disturbance. OSHA requires notification to all trades/contractors about the condition of the ACBM's to prevent possible occupational exposures.

Demolition activities in public and commercial buildings are regulated by OSHA, EPA, and SCDHEC. Code 40 of Federal Regulations Part 61, Subpart M, Final Rule, "National Emissions Standards for Hazardous Air Pollutants" (NESHAP), and SCDHEC Regulation 61-86.1 require the proper removal and disposal of ACBM that is affected by renovation or demolition. Demolition of the subject structures will require written notification, proper transportation, and disposal per state and federal regulations.

## PHOTOGRAPHS

### Commercial Building – 307/309 East Main Street – Moncks Corner, SC



HOMOGENEOUS AREA 01  
1' x 1' CEILING TILE



HOMOGENEOUS AREA 02  
VINYL SHEET FLOORING  
(BEIGE STONE)



HOMOGENEOUS AREAS 03, 04  
STAIR TREAD MASTIC (BROWN)  
STAIR TREAD (TAN)



HOMOGENEOUS AREA 05  
WIRE INSULATION



HOMOGENEOUS AREA 056  
INTERIOR CAULK



HOMOGENEOUS AREA 07  
DRYWALL



## PHOTOGRAPHS

### Commercial Building – 307/309 East Main Street – Moncks Corner, SC



HOMOGENEOUS AREA 08  
JOINT COMPOUND



HOMOGENEOUS AREA 09  
EXTERIOR CAULK



HOMOGENEOUS AREA 10  
WINDOW GLAZE



HOMOGENEOUS AREA 11  
SIDING FELT PAPER



HOMOGENEOUS AREA 12  
TRANSITE SIDING



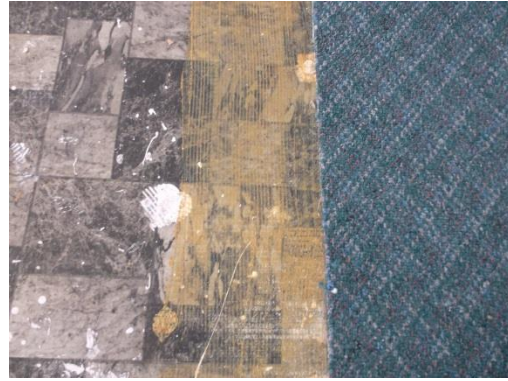
HOMOGENEOUS AREAS 13, 14  
VINYL SHEET FLOORING  
(BLACK/GRAY STONE)  
MASTIC (TAN)

## PHOTOGRAPHS

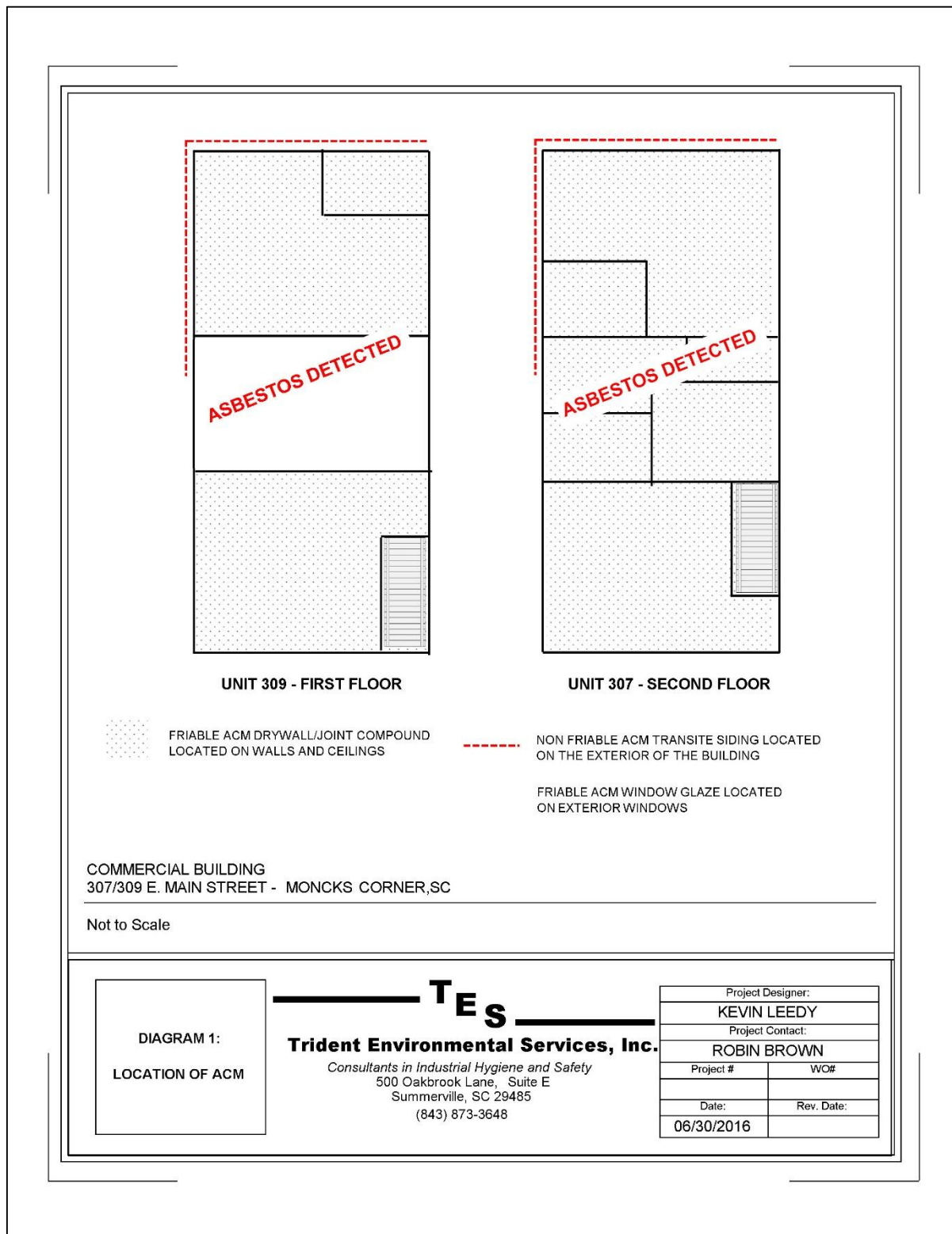
### Commercial Building – 307/309 East Main Street – Moncks Corner, SC



HOMOGENEOUS AREAS 15, 16  
VINYL SHEET FLOORING  
(BEIGE/BLUE FLOWERS)  
MASTIC (TAN)



HOMOGENEOUS AREA 17  
CARPET MASTIC (TAN)





## COMPREHENSIVE ASBESTOS SURVEY

Inspection Date: 06/30/2016

Preparation Date: 07/05/2016

Inspected & Prepared By:



Hunter Hanson  
S.C. Inspector License BI – 01468

### SCDHEC ISSUED Asbestos ID Card

**Hunter Hanson**



		Expiration Date
AIRSAMPLER	AS-00413	01/17/17
CONSULTBI	BI-01468	10/06/16

Inspected By:



Tim Nickel  
S.C. Inspector License BI – 00844

### SCDHEC ISSUED Asbestos ID Card

**Tim Nickel**



		Expiration Date
AIRSAMPLER	AS-00147	01/17/17
CONSULTBI	BI-00844	09/02/16

United States Department of Commerce  
National Institute of Standards and Technology



## Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200841-0

**EMSL Analytical, Inc.**  
Charlotte, NC

is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:

### Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).

2015-06-02 through 2016-06-30

Effective Dates



A handwritten signature in blue ink, appearing to read "Gary R. M. J.", positioned over the official seal of the Department of Commerce.

For the National Voluntary Laboratory Accreditation Program



**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005**

**EMSL Analytical, Inc.**  
376 Crompton Street  
Charlotte, NC 28273  
Mr. Lee Plumley  
Phone: 704-525-2205 Fax: 704-525-2382  
Email: lplumley@emsl.com  
<http://www.emsl.com>

**ASBESTOS FIBER ANALYSIS**

**NVLAP LAB CODE 200841-0**

**Bulk Asbestos Analysis**

<u>Code</u>	<u>Description</u>
18/A01	EPA 600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

**Airborne Asbestos Analysis**

<u>Code</u>	<u>Description</u>
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

A handwritten signature in blue ink, appearing to read "Lee Plumley".

For the National Voluntary Laboratory Accreditation Program



**EMSL Analytical, Inc.**

376 Crompton Street Charlotte, NC 28273  
Tel/Fax: (704) 525-2205 / (704) 525-2382  
<http://www.EMSL.com> / [charlottelab@emsl.com](mailto:charlottelab@emsl.com)

EMSL Order: 411605167

Customer ID: TRID50

Customer PO:

Project ID:

**Attention:** Kevin Leedy

Trident Environmental Services, Inc.  
500 Oakbrook Lane  
Suite E  
Summerville, SC 29485

**Phone:** (843) 670-9987

**Fax:**

**Received Date:** 07/01/2016 9:10 AM

**Analysis Date:** 07/01/2016

**Collected Date:** 06/30/2016

**Project:** 307 & 309 East Main Street, Moncks Corner, SC

**Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
01-01 411605167-0001	Room 3 - 1x1 Ceiling Tile	Brown/White Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
01-02 411605167-0002	Room 3 - 1x1 Ceiling Tile	Brown/White Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
01-03 411605167-0003	Room 3 - 1x1 Ceiling Tile	Brown/White Non-Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
02-04 411605167-0004	Room 1 - Vinyl Sheet Flooring (Beige Stone)	Gray/Beige Fibrous Homogeneous	20% Cellulose 3% Synthetic	77% Non-fibrous (Other)	None Detected
02-05 411605167-0005	Room 1 - Vinyl Sheet Flooring (Beige Stone)	Green/Beige Fibrous Homogeneous	50% Cellulose 3% Synthetic	47% Non-fibrous (Other)	None Detected
03-07 411605167-0006	307 Stairwell - Stair Tread Mastic	Brown Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
03-08 411605167-0007	307 Stairwell - Stair Tread Mastic	Brown Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
04-10 411605167-0008	307 Stairwell - Vinyl Stair Tread	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
04-11 411605167-0009	307 Stairwell - Vinyl Stair Tread	Tan Non-Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
05-13 411605167-0010	Attic - Wire Insulation	Brown/Gray/Black Fibrous Homogeneous	2% Cellulose 90% Glass	8% Non-fibrous (Other)	None Detected
05-14 411605167-0011	Attic - Wire Insulation	Brown/Gray/Black Fibrous Homogeneous	10% Cellulose 85% Glass	5% Non-fibrous (Other)	None Detected
05-15 411605167-0012	Attic - Wire Insulation	Gray Fibrous Homogeneous	3% Cellulose 90% Glass	7% Non-fibrous (Other)	None Detected
06-16 411605167-0013	307 Restroom - Interior Caulk	White Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
06-17 411605167-0014	307 Restroom - Interior Caulk	White Non-Fibrous Homogeneous		8% Ca Carbonate 92% Non-fibrous (Other)	None Detected
07-19 411605167-0015	Room 4 - Drywall	Brown/Gray Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
07-20 411605167-0016	Room 6 - Drywall	Brown/Gray Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected

Initial Report From: 07/02/2016 11:30:36



**EMSL Analytical, Inc.**

376 Crompton Street Charlotte, NC 28273  
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<http://www.EMSL.com / charlottelab@emsl.com>

EMSL Order: 411605167

Customer ID: TRID50

Customer PO:

Project ID:

**Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
07-21 411605167-0017	Room 7 - Drywall	Brown/Gray Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
08-22 411605167-0018	Room 4 - Joint Compound	Tan Non-Fibrous Homogeneous		40% Ca Carbonate 58% Non-fibrous (Other)	2% Chrysotile
08-23 411605167-0019	Room 4 - Joint Compound				Positive Stop (Not Analyzed)
08-24 411605167-0020	Room 6 - Joint Compound				Positive Stop (Not Analyzed)
08-25 411605167-0021	Room 7 - Joint Compound				Positive Stop (Not Analyzed)
08-26 411605167-0022	Room 7 - Joint Compound				Positive Stop (Not Analyzed)
09-27 411605167-0023	Exterior Door - Exterior Caulk	Gray/White Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
09-28 411605167-0024	Exterior Door - Exterior Caulk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10-30 411605167-0025	Window 1 - Window Glaze	Gray Non-Fibrous Homogeneous		20% Ca Carbonate 77% Non-fibrous (Other)	3% Chrysotile
10-31 411605167-0026	Window 2 - Window Glaze				Positive Stop (Not Analyzed)
11-33 411605167-0027	Exterior Siding - Siding Felt Paper	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
11-34 411605167-0028	Exterior Siding - Siding Felt Paper	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
12-36 411605167-0029	Exterior Siding - Transite Siding	Gray Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
12-37 411605167-0030	Exterior Siding - Transite Siding				Positive Stop (Not Analyzed)
12-38 411605167-0031	Exterior Siding - Transite Siding				Positive Stop (Not Analyzed)
13-39 411605167-0032	309 Room 8 - Vinyl Sheet Flooring (Black/Gray Stone)	Gray/Black Fibrous Homogeneous	5% Cellulose 1% Glass	94% Non-fibrous (Other)	None Detected
13-40 411605167-0033	309 Room 8 - Vinyl Sheet Flooring (Black/Gray Stone)	Gray/Black Fibrous Homogeneous	10% Cellulose 2% Glass	88% Non-fibrous (Other)	None Detected
14-42 411605167-0034	309 Room 8 - L1 - Sheet Flooring Mastic (Tan)	Tan Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
14-43 411605167-0035	309 Room 8 - L1 - Sheet Flooring Mastic (Tan)	Tan Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected

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EMSL Order: 411605167

Customer ID: TRID50

Customer PO:

Project ID:

**Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized  
Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
15-45 <small>411605167-0036</small>	309 Room 8 - L2 - Vinyl Sheet Flooring (Beige/ Blue Flowers)	Gray/Beige Fibrous Homogeneous	10% Cellulose 1% Glass	89% Non-fibrous (Other)	None Detected
15-46 <small>411605167-0037</small>	309 Room 8 - L2 - Vinyl Sheet Flooring (Beige/ Blue Flowers)	Beige Fibrous Homogeneous	10% Cellulose 2% Glass	88% Non-fibrous (Other)	None Detected
16-48 <small>411605167-0038</small>	309 Room 8 - L2 - Sheet Flooring Mastic (Tan)	Tan Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
16-49 <small>411605167-0039</small>	309 Room 8 - L2 - Sheet Flooring Mastic (Tan)	Tan Non-Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
08-51 <small>411605167-0040</small>	309 Room 10 - Joint Compound				Positive Stop (Not Analyzed)
08-52 <small>411605167-0041</small>	309 Room 11 - Joint Compound				Positive Stop (Not Analyzed)
17-53 <small>411605167-0042</small>	309 - Carpet Mastic (Tan)	Tan Non-Fibrous Homogeneous	<1% Synthetic	10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
17-54 <small>411605167-0043</small>	309 - Carpet Mastic (Tan)	Tan Non-Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected

Analyst(s)

Aaron Hartley (14)  
Kyle Collins (20)

Lee Plumley, Laboratory Manager  
or Other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Charlotte, NC NVLAP Lab Code 200841-0, VA 3333 00312

Initial Report From: 07/02/2016 11:30:36





**EMSL Analytical, Inc.**

376 Crompton Street, Charlotte, NC 28273

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<http://www.EMSL.com>

[charlottelab@emsl.com](mailto:charlottelab@emsl.com)

EMSL Order: 411605167  
CustomerID: TRID50  
CustomerPO:  
ProjectID:

Attn: **Kevin Leedy**  
**Trident Environmental Services, Inc.**  
**500 Oakbrook Lane**  
**Suite E**  
**Summerville, SC 29485**

Phone: (843) 873-3648  
Fax: (843) 821-1767  
Received: 07/05/16 8:00 AM  
Analysis Date: 7/6/2016  
Collected: 6/30/2016

Project: **307 & 309 East Main Street, Moncks Corner, SC**

**Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM**  
**via EPA/600/R-93/116 Section 2.5.5.1**

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
02-06 411605167-0044	Room 1 - Vinyl Sheet Flooring (Beige Stone)	Green/Beige Fibrous Heterogeneous	100	None	No Asbestos Detected
03-09 411605167-0045	307 Stairwell - Stair Tread Mastic	Tan Non-Fibrous Homogeneous	100	None	No Asbestos Detected
04-12 411605167-0046	307 Stairwell - Vinyl Stair Tread	Brown Non-Fibrous Homogeneous	100	None	No Asbestos Detected
06-18 411605167-0047	307 Restroom - Interior Caulk	White Non-Fibrous Homogeneous	100	None	No Asbestos Detected
09-29 411605167-0048	Exterior Door - Exterior Caulk	White Non-Fibrous Homogeneous	100	None	No Asbestos Detected
11-35 411605167-0049	Exterior Siding - Siding Felt Paper	Black Fibrous Homogeneous	100	None	No Asbestos Detected
13-41 411605167-0050	309 Room 8 - Vinyl Sheet Flooring (Black/ Gray Stone)	Gray/Black Fibrous Heterogeneous	100	None	No Asbestos Detected
14-44 411605167-0051	309 Room 8 - L1 - Sheet Flooring Mastic (Tan)	Tan Non-Fibrous Homogeneous	100	None	No Asbestos Detected
15-47 411605167-0052	309 Room 8 - L2 - Vinyl Sheet Flooring (Beige/ Blue Flowers)	Beige Fibrous Heterogeneous	100	None	No Asbestos Detected

Analyst(s)

Derrick Young (11)

*Lee Plumley*

Lee Plumley, Laboratory Manager  
or other approved signatory

This laboratory is not responsible for % asbestos in total sample when the residue only is submitted for analysis. The above report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.  
Samples analyzed by EMSL Analytical, Inc. Charlotte, NC

Initial report from 07/06/2016 15:30:51

Test Report EPANOB-7.24.0 Printed: 7/6/2016 3:30:51 PM



**EMSL Analytical, Inc.**

376 Crompton Street, Charlotte, NC 28273

Phone/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com>

[charlottelab@emsl.com](mailto:charlottelab@emsl.com)

EMSL Order: 411605167  
CustomerID: TRID50  
CustomerPO:  
ProjectID:

Attn: **Kevin Leedy**  
**Trident Environmental Services, Inc.**  
**500 Oakbrook Lane**  
**Suite E**  
**Summerville, SC 29485**

Phone: (843) 873-3648  
Fax: (843) 821-1767  
Received: 07/05/16 8:00 AM  
Analysis Date: 7/6/2016  
Collected: 6/30/2016

Project: **307 & 309 East Main Street, Moncks Corner, SC**

**Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM**  
**via EPA/600/R-93/116 Section 2.5.5.1**

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
16-50 411605167-0053	309 Room 8 - L2 - Sheet Flooring Mastic (Tan)	Tan Non-Fibrous Homogeneous	100	None	No Asbestos Detected
17-55 411605167-0054	309 - Carpet Mastic (Tan)	Tan Non-Fibrous Homogeneous	100	None	No Asbestos Detected

Analyst(s)

Derrick Young (11)

Lee Plumley, Laboratory Manager  
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Charlotte, NC

Initial report from 07/06/2016 15:30:51

Test Report EPANOB-7.24.0 Printed: 7/6/2016 3:30:51 PM

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**Charlotte, NC 28273**  
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OrderID: 411605167

411605167

**TES**  
Trident Environmental Services, Inc.  
Consultants in Industrial Hygiene and Safety  
500 Oakbrook Lane, Suite E  
Summerville, SC 29485  
Phone (843) 873-3648  
Fax (843) 821-1767

**CHAIN OF CUSTODY FORM**  
Asbestos Bulk Samples

Project Name: 307-309 East Main Street

Date: 6-30-16

Location: Moncks Corner, SC

DESCRIPTION OF EACH SAMPLE AREA						ASSESSMENT OF MATERIALS		
Homog Area	Sample ID	Location	Description	Friable (+)	Friable (-)	Asbestos Type	COND Assess	HAZ Assess
	01	Room 3	1x Ceiling tile	X			7	
	02			X				
	03			X				
	04	Room 1	Vinyl Sheet flooring	X			7	
	05	↓	(Range stove)	X				
	06			X				
	07	307 Stairwell	Stair tread Material		X		7	
	08	↓			X			
	09				X			
	10	307 Stairwell	Vinyl Stair tread		X		7	
	11				X			
	12	↓			X			
	13	Attic	Wire Insulation	X		300LF	1	
	14			X		300LF		
	15			X				
	16	307 Restroom	Interior Caulk		X	20SF	7	
	17				X			
	18				X			
	19	Room 4	Drywall	X			7	
	20	Room 6		X				
	21	Room 7		X				

**Condition Assessment Categories**

- (1) Thermal Systems Insulation - Good Condition
- (2) Thermal Systems Insulation - Damaged
- (3) Thermal Systems Insulation - Significantly Damaged
- (4) Surfacing - Good Condition
- (5) Surfacing - Damaged
- (6) Surfacing - Significantly Damaged
- (7) Miscellaneous - Good Condition
- (8) Miscellaneous - Damaged
- (9) Miscellaneous - Significantly Damaged

**Asbestos Present**

- (1) Amosite
- (2) Chrysotile
- (3) Crocidolite
- (4) Anthophyllite
- (5) Tremolite
- (6) Actinolite
- PACM - Presumed Asbestos Containing Material

**HAZARD Assessment Categories**

- G = Good Condition
- D = Damaged
- S = Significantly Damaged
- LPD = Low Potential for Disturbance
- PD = Potential for Damage
- PSD = Potential for Significant Damage

Samples Collected by: Hanta Haner

Date / Time: 6-30-16

Samples Received by: \_\_\_\_\_

Date / Time: \_\_\_\_\_



OrderID: 411605167

411605167

**TES**  
Trident Environmental Services, Inc.  
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Phone (843) 873-3648  
Fax (843) 821-1767

**CHAIN OF CUSTODY FORM**  
**Asbestos Bulk Samples**

Project Name: 307/309 East Main Street

Date: 6-30-16

Location: Moncks Corner, SC

DESCRIPTION OF EACH SAMPLE AREA						ASSESSMENT OF MATERIALS		
Homog Area	Sample ID	Location	Description	Friable (+)	Friable (-)	Asbestos Type	COND Assess	HAZ Assess
	08 22	Room 4	Joint Compound	X			4	
	23	Room 4		X				
	24	Room 6		X				
	25	Room 7		X				
	26	Room 7		X				
	09 27	Exterior Door	Exterior Caulk		X		7	
	28	↓			X			
T	29	Window 1			X			
	30	Window 1	Window Glaze	X			7	
	31	Window 2		X				
T	32	Window 3		X				
	11 33	Exterior Siding	Siding Felt Paper		X	2846		
	34	↓			X			
T	35	↓			X			
	12 36	Exterior Siding	Transite Siding		X	1,000 SF		
	37	↓			X			
	38	↓			X			
	13 39	309 Room 8	Vinyl Sheet flooring	X			7	
	40	↓	(Black/Gray Stone)	X				
T	41	↓		X				

**Condition Assessment Categories**

- (1) Thermal Systems Insulation - Good Condition
- (2) Thermal Systems Insulation - Damaged
- (3) Thermal Systems Insulation - Significantly Damaged
- (4) Surfacing - Good Condition
- (5) Surfacing - Damaged
- (6) Surfacing - Significantly Damaged
- (7) Miscellaneous - Good Condition
- (8) Miscellaneous - Damaged
- (9) Miscellaneous - Significantly Damaged

**Asbestos Present**

- (1) Amosite (6) Actinolite
- (2) Chrysotile
- (3) Crocidolite
- (4) Anthophyllite
- (5) Tremolite
- PACM - Presumed Asbestos Containing Material

**HAZARD Assessment Categories**

- G = Good Condition
- D = Damaged
- S = Significantly Damaged
- LPD = Low Potential for Disturbance
- PD = Potential for Damage
- PSD = Potential for Significant Damage

Samples Collected by: Hunter Hansen

Date / Time: 6-30-16

Samples Received by: \_\_\_\_\_

Date / Time: \_\_\_\_\_

**TES**  
**Trident Environmental Services, Inc.**  
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OrderID: 411605167

411605167

**T E S**  
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Summerville, SC 29485  
Phone (843) 873-3648  
Fax (843) 821-1767

Project Name: 307 & 309 East Main Street Date: 6-30-16

Location: Mank's Corner, SE

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(1) Thermal Systems Insulation - Good Condition  
(2) Thermal Systems Insulation - Damaged  
(3) Thermal Systems Insulation - Significantly Damaged  
(4) Surfacing - Good Condition  
(5) Surfacing - Damaged  
(6) Surfacing - Significantly Damaged  
(7) Miscellaneous - Good Condition (8) Miscellaneous - Damaged  
(9) Miscellaneous - Significantly Damaged

(1) Amosite (6) Actinolite  
(2) Chrysotile  
(3) Crocidolite  
(4) Anthophyllite  
(5) Tremolite  
PACM - Presumed Asbestos Containing Material

G = Good Condition  
 D = Damaged  
 S = Significantly Damaged  
 LPD = Low Potential for Disturbance  
 PD = Potential for Damage  
 PSD = Potential for Significant Damage

Samples Collected by: Hunter Hays

Date / Time: 6-30-16  
Date / Time: \_\_\_\_\_